SPECIFICATIONS

General

Type	Desktop
Paper size	Max. A3 (11" x 17"), min. A5 (5 1/2" x 8 1/2") [min. A6R via bypass]
Paper capacity	Standard: 350 sheets (250 + 100), maximum: 1,100 sheets
Warm-up time	45 sec.
First copy time*1	7.2 sec.
Memory	Page memory: 32MB Optional memory: 256MB (AR-SM5)
Power requirements	Rated local AC voltage ±10%, 50/60 Hz
Power consumption (max.)	1.2 kW
Dimensions (W x D x H)	590 x 595 x 435 mm (23 1/4" x 23 27/64" x 17 1/8") (excluding document cover)
Weight (main unit only)	30.0 kg (66.2 lbs.)

Copier

Copy speed (max.)	16 cpm (A4, 8 1/2" x 11")
Original paper size	Max. A3 (11" x 17")
Continuous copy	Max. 999 copies
Resolution	Scan: 600 x 600 dpi (Photo mode), 600 x 300 dpi (Auto/Text mode) Print: 600 x 600 dpi
Gradation	256 levels
Zoom range	25% to 400% (50% to 200% using SPF) in 1% increments
Preset copy ratios	10 ratios (5 reduction + 5 enlargement)
Features	Auto paper selection, auto magnification selection, auto tray switching, Scan Once/Print Many, rotation copy, electronic sorting, XY zoom, dual page copy, card shot, margin shift, edge/centre erase, multi-shot (4-in-1, 2-in-1), offset stack, pre-heat/auto power shut-off modes, toner save mode, copy/print/scan auditing mode*2 (50 accounts total)

Printer

Print speed (max.)	16 ppm
Resolution	600 dpi
Interface	IEEE 1284, USB 1.1, USB 2.0
Supported OS	Windows NT® 4.0 (Workstation SP5 and later), Windows® 2000 (Professional), Windows® XP (Home/Professional), Windows® 95/98/Me
PDL emulation	Standard: SPLC (Sharp Printer Language with Compression) Option*3: PCL 6/5e, PS3 emulation
Available fonts	80 fonts for PCL, 136 fonts for PS3 emulation*4
Features	RIP Once/Print Many, N-up (2/4), fit to page, image orientation, auto paper selection, rotation print, output tray selection, image adjustment, pure black and white, watermarks, offset print, status window

Colour Scanner

Scan method	Push scan (via operation panel) and pull scan (with TWAIN-supporting application)
Resolution	600 x 600 dpi (setting range: 50 to 9,600 dpi*5)
Protocols	TWAIN, WIA (Windows XP only), STI
Interface	USB 1.1, USB 2.0
Supported OS	Windows 98/Me, Windows XP (Home/Professional), Windows 2000 (Professional)
Scanner utilities	Button Manager, Sharpdesk™

Network Printing/Scanning (optional AR-NB3 required)

Resolution	600 dpi, 300 dpi*6
Network interface	10Base-T/100Base-TX
Supported OS	Windows 95/98/Me, Windows NT 4.0 (Workstation SP5 and later), Windows 2000 (Professional)/XP (Home/Professional), Mac OS 8.6 to 9.2.2, Mac OS X 10.1.5, 10.2 to 10.2.8 (excluding 10.2.2), 10.3 to 10.3.4*4
Memory	64MB, max. 320MB with SO-DIMM 256MB (144-pin)
Network protocols	TCP/IP, IPX/SPX (Netware), NetBEUI, EtherTalk (AppleTalk)
Features	PCL and PS3 emulation*4, printer administration utility, printer status monitor, PDF/TIFF direct printing*7, network scan (scan to e-mail/FTP server/desktop), LDAP, IP/MAC address filtering
File formats	JPEG, PDF, TIFF

Facsimile (optional AR-FX11 required)

Compression method	MH/MR/MMR/JBIG
Communication protocol	Super G3/G3
Transmission time	Less than 3 seconds*8
Modem speed	33,600 bps to 2,400 bps with automatic fallback
Transmission resolution	Standard: 8 dots x 3.85 lines/mm Ultra Fine: 16 dots x 15.4 lines/mm
Recording width	A3 to A5 (11" x 17" to 5 1/2" x 8 1/2")
Memory	2MB flash memory Optional memory: 8MB (AR-MM9)
Greyscale levels	Equivalent to 256 levels
Features	Rapid and group dials (50 in total), 300 speed dials, 9 job programmes, broadcasting (200 destinations), memory transmission/reception, quick on-line transmission, auto reduction (transmission/reception), rotation transmission/reception, long original transmission (max. 800 mm), divided reception, timer transmission, polling, F-Code compatibility (confidential, relay broadcast, polling), auditing mode (50 accounts)

*1: When feeding A4 (8 1/2" x 11") sheets from the paper tray. First copy time depends on the operating environment and the status of use.
*2: AR-NB3 required for print/scan auditing mode.
*3: AR-NB3 required. AR-PK1N also required for PostScript printing.
*4: AR-PK1N required.
*5: Resolutions higher than 600 dpi are interpolated.
*6: 300 dpi can be selected only when using the PCL6 or PCL5e printer driver.
*7: PDF direct printing requires AR-PK1N.
*8: Based on an A4 document with approx. 700 characters at standard resolution in Super G3 mode, 33,600 bps, JBIG compression.

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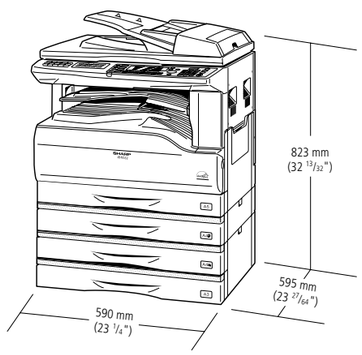

SHARP
SHARP CORPORATION OSAKA, JAPAN

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SHARP

AR-M162

Digital Multifunctional System

Superior multifunction performance with fax and colour scan

COPY | PRINT | NETWORK PRINT OPTION | COLOUR SCAN | NETWORK COLOUR SCAN OPTION | SHARPDESK™ | FAX OPTION

The all-in-one solution that has all your everyday office needs covered

COPYING

Want to keep up with today's fast-paced and graphic-intensive business communications? The AR-M162 has all your basic office needs covered in one powerful document solution that delivers ultra-efficient copying/printing, brilliant colour scanning, and optional Super G3 faxing. In addition to its extensive range of superb copier and printing functions, the AR-M162 offers convenient connectivity for small workgroups with a Smart Sharing interface for up to 3 users. And with options available for powerful network printing/scanning, the AR-M162 even has the functionality to grow with your business. Conveniently packaged in a compact and user-friendly design, the AR-M162 delivers the power and ease-of-use that today's businesses are looking for.

• Productive Copying

- Quick copy speed of max. 16 cpm
- Scan Once/Print Many function and electronic sorting
- Optional 40-sheet SPF (single pass feeder)
- Versatile image editing functions
- Max. 1,100-sheet paper capacity

• Performance Printing

- RIP Once/Print Many function for max. 16 ppm
- Speed-enhanced Sharp Printer Language with Compression
- Smart sharing with three PCs via IEEE 1284, USB 1.1, and USB 2.0
- Upgradeable to network printing with network utilities
- IP/MAC address filtering prevents unauthorised access (option)
- Convenient printing functions

• Colour Scanning

- Full-colour scanning at 600 dpi and up to A3 in size
- Sharpdesk™ provides easy desktop management of documents in over 200 file types
- Button Manager for quick and easy scanning
- Upgradeable to network colour scanning (scan to e-mail/desktop/FTP server)
- LDAP compatibility for easy browsing of e-mail addresses

• Speedy Faxing (option)

- Super G3 faxing and JBIG compression
- Quick on-line transmission
- Max. 300 speed dials

• User- and Environment-Friendly

- Universal design concept and 5-line LCD operation panel
- Energy-efficient design
- Lead-free wiring harnesses and AC power cords
- Chromium-free surface-treated steel sheet

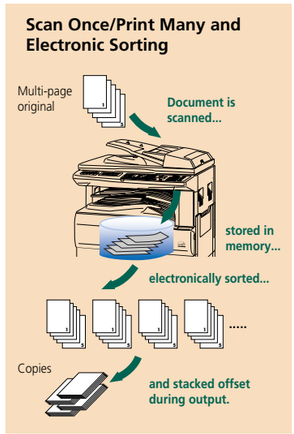
Speedy Copying and Quick First Copy Time

The AR-M162 has a quick first copy time of **7.2 seconds*** to save valuable time when performing multiple short-run jobs. And with a continuous copy rate of **16 cpm** (A4 size [8 ½" x 11"]), you can do more copy jobs in less time.

*Depends on the operating environment and the status of use.

Scan Once/Print Many and Electronic Sorting

The AR-M162's Scan Once/Print Many (SOPM) function does one scan of multiple-page documents and stores them in memory for making up to **999 copies** of each page. The Electronic Sorting function then **automatically collates** multiple sets of copies in page order without the aid of a sorter. The AR-M162 also stacks each set slightly shifted apart from the previous (**offset stacking**) for easy retrieval. All this adds up to speedy copying that boosts productivity even for large-volume documents.



Time-Saving SPF (option)

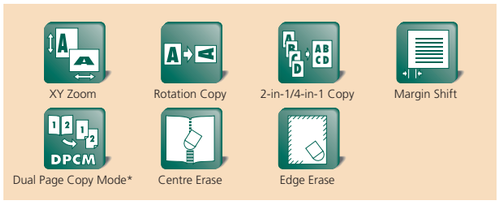
For copying productivity, the AR-M162 can be equipped with the optional AR-SP6N SPF (**single pass feeder**). It eliminates the tedious task of placing pages by hand and allows you to automatically make copies from a stack of **up to 40 originals**.

Paper Capacity

The AR-M162 comes standard with a 250-sheet paper tray and a 100-sheet multi-bypass feeder. Two types of extra paper drawers are available for a total paper capacity of up to **1,100 sheets**.

Versatile Editing Functions

The AR-M162 is standard equipped with various image editing functions that make copying more convenient.

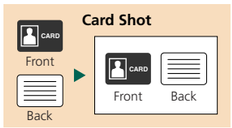


*Not available when using SPF.

Card Shot

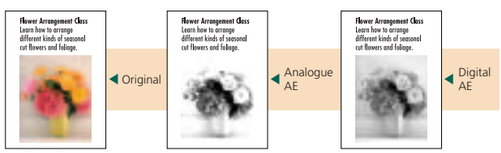
This function enables one-touch scanning and copying of both sides of a card (credit cards, ID cards, etc.) onto a single page.

Note: Not available when using SPF.



Superb Image Quality

600 dpi resolution and 256-level greyscale ensure finely detailed reproduction, while **Digital Auto Exposure Control** provides optimum copy contrast. For the best results, users can select **Text mode** for text-only originals or **Photo mode** that gives detailed, high-quality reproduction of photos and delicate halftone images.



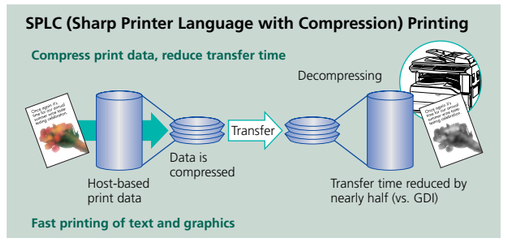
Other Key Features

- Wide zoom range from **25% to 400%** with 10 preset ratios
- Cost-efficient Toner Save mode
- Copy/print/scan auditing (50 accounts total)
- Automatic paper/magnification selection

PRINTING

Speedy Printing with Sharp Technology

The AR-M162 is a high-performance printer incorporating Sharp Printer Language with Compression (SPLC) technology. SPLC effectively reduces the data size of print jobs, speeding up the data transfer time and printing process while improving overall throughput. Also, the **RIP Once/Print Many** (ROPM) function saves print data in the AR-M162's internal memory and transfers it to output at a quick rate of **16 ppm** (A4 size) in 600 dpi resolution.

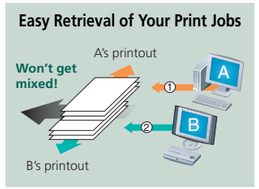

SPLC (Sharp Printer Language with Compression) Printing
Compress print data, reduce transfer time
Decompressing
Transfer
Data is compressed
Host-based print data
Transfer time reduced by nearly half (vs. GDI)
Fast printing of text and graphics

Smart Sharing

The AR-M162's Smart Sharing function allows you to connect multiple computers directly to the machine without having to go through a network. This is great news for small workgroups that need to share the unit with only a few PCs and don't have a LAN set up in their office. **Two USB ports** (USB 1.1 and USB 2.0) and **one IEEE 1284 port** are provided as standard for a total of three PC connections.

Job Offset and Job Separator

The AR-M162 ensures your documents will stay neatly organised even when others are sharing the machine. To make it easier to locate and retrieve your documents from the tray, the AR-M162's **Job Offset** function stacks each print job slightly shifted apart from one another. In addition, the optional AR-TR4 **Job Separator Tray Kit** lets you send printer output to the Job Separator tray or beneath it, preventing your job from getting mixed in with copies and faxes.



Printer Status Window

A Printer Status Window conveniently allows you to monitor important printer information on your PC, including on-line/off-line status, name of the active print job, and machine conditions such as the amount of paper or toner.

Printer Status Window

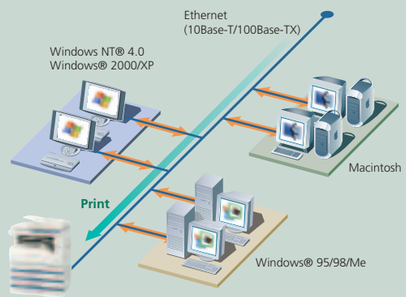
Other Key Features

- N-up, Fit-to-Page, watermarks

NETWORK PRINTING (option)

Powerful Network Printing

The AR-M162 supports popular network protocols including TCP/IP and IPX/SPX. The optional AR-NB3 Network Printing/Scanning Expansion Kit allows easy printer sharing through your office network. The AR-NB3 also gives you **PCL 6/5e** printer language emulations. For compatibility with more fonts and better graphics handling, **PostScript 3** emulation is available with the optional AR-PK1N PS3 Expansion Kit.

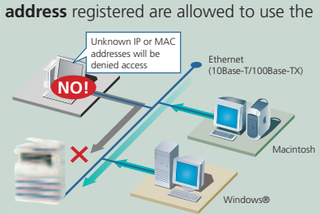


Network Utility Software

Sharp's original **Printer Administration Utility** software makes printer networks easier to manage by allowing network administrators to customise monitored items and view settings such as the IP address directly from their PC. And with the **Printer Status Monitor**, network PC screens can display printer conditions, such as toner levels and whether there is any paper remaining.

IP/MAC Address Filtering for Security

The AR-NB3's IP/MAC address filtering function provides highly secure operation by restricting access to the AR-M162 on your office network. Only PCs that have either their **IP address** or **MAC (media access control) address** registered are allowed to use the AR-M162. Attempted access from an unknown IP or MAC address will be denied, preventing unauthorised use.



Other Key Features

- Barcode font compatibility (requires AR-PF1)
- PDF/TIFF direct printing (PDF direct printing requires AR-PK1 N)

COLOUR SCANNING

A3 Full-Colour Scanning

The AR-M162 lets you easily scan colour originals in **600 x 600 dpi** resolution and use them to create vivid, impressive colour documents or presentation materials. The optional 40-sheet SPF gives efficient multi-page document scanning. The AR-M162's high-quality colour CCD with wide depth of focus gives you clear, full-colour scanning of originals with uneven surfaces*, such as fabric and documents with other paper pasted on top. This means more creative possibilities and more ways to communicate accurately and effectively.

*There are limits (height, width, and depth) to uneven-surface objects that can be scanned.

Push and Pull Scanning

Operation is quick and easy — simply press the Scan button, select an application, and press Start (**push scan**). Up to six pre-registered applications are available, including Sharpdesk™, e-mail*, Microsoft® Word*, OCR*, and fax*. **Button Manager** software allows you to change/assign these destination applications and scan settings. The AR-M162's scanner driver is also compatible with the **TWAIN** standard, allowing it to be used with various TWAIN-compliant applications (**pull scan**).

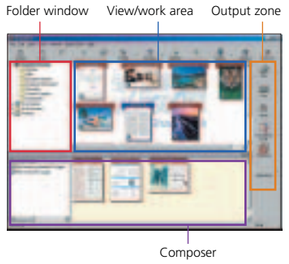
*These applications require additional software.

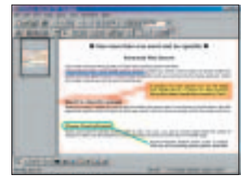
Sharpdesk™ — Document Management on Your PC

Sharpdesk™ is an original Sharp application that provides integrated desktop management of documents in over **200 file formats**, including scanned paper-based documents and those created with popular applications such as Word. It allows you to organise, edit, search, and distribute your documents, all with simple drag-and-drop operation.

- Intuitive desktop display features **thumbnail** viewing
- Sharpdesk Imaging provides **annotation** tools for paper-free proofreading
- Sharpdesk **Composer** combines different types of files into a single document
- **Optical character recognition** converts documents into editable text files
- **Output zone** distributes files to e-mail, printers, and other applications
- **File search** allows searching by file name, keyword, or thumbnail

Note: Sharpdesk is not compatible with Windows® 95 and Windows NT® 4.0 (Service Pack 5.0).





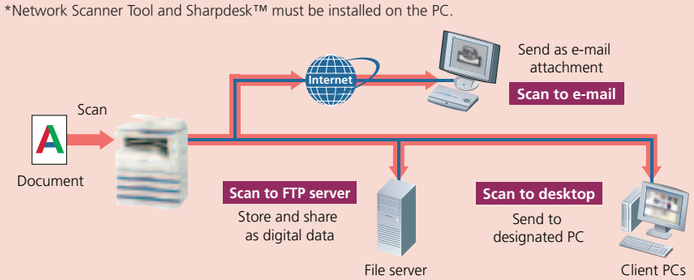
Annotation function

FULL-COLOUR NETWORK SCANNING (option)

Scan to Desktop, E-Mail, or FTP Server

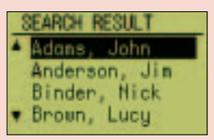
The optional AR-NB3 Network Printing/Scanning Expansion Kit turns the AR-M162 into a convenient full-colour network scanner. As easy as making a copy, you can send scanned images anywhere over the network. Scanned files can be forwarded directly to your PC* (scan to desktop), sent as an attachment to any e-mail address over the Internet (scan to e-mail), or stored on a file server where they can be easily accessed from any PC on the network (scan to FTP server).

*Network Scanner Tool and Sharpdesk™ must be installed on the PC.



LDAP Support

The AR-NB3 provides the AR-M162 with LDAP (lightweight directory access protocol) support, which eliminates the need to enter or register an entire e-mail address. Simply select "Global Address" from the LCD control panel, enter the first few letters of the recipient's name, and the AR-M162 displays a list of possible matches from names and e-mail addresses on your company's LDAP server. This feature saves precious time and prevents errors when typing e-mail addresses.



LDAP search results

FAXING (option)

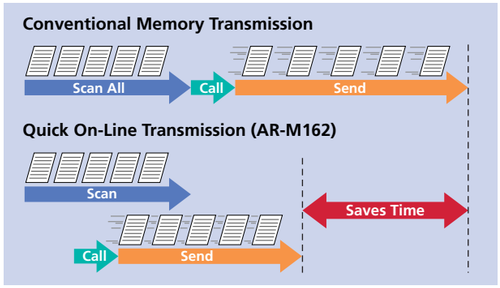
High-Speed Operation

The AR-FX11 Fax Expansion Kit turns the AR-M162 into a **Super G3 fax** machine featuring a fast modem speed of 33.6 Kbps. Using JBIG data compression, the AR-M162 can send an A4 (8 1/2" x 11") size page in under 3 seconds*. When used with the optional 40-sheet SPF, your faxing jobs become even more efficient.

*Based on an A4 document with approx. 700 characters at standard resolution.

Quick On-Line Transmission

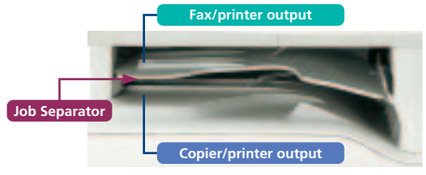
The AR-M162 starts dialling and transmitting a multi-page document as soon as the first page is scanned into memory. This greatly reduces the overall time it takes to send the document.



Job Separator

With the optional AR-TR4 Job Separator Tray Kit installed, you can do copy jobs while receiving incoming faxes without them getting mixed together.

Note: Output destinations can be designated, placing fax or printer output onto the Job Separator tray and copier or printer output onto the bottom tray.



PC-Fax Transmission

A PC-Fax function allows you to directly send a document created on your PC to a recipient's fax machine via the AR-M162. Since all faxing procedures are done on your PC without printing to paper, this function saves time, increases faxing productivity, and retains original document quality.

Note: Consult your local Sharp dealer for the date of availability.

Auto Dialling

The AR-M162 stores up to **50** frequently called numbers (including Group dials) for instant one-touch Rapid Dial connections and up to **300** numbers for three-digit Speed Dialling.

Fax Reception Light

The AR-M162 lets you know when an incoming fax has been received with an LED on the corner of the operation panel that blinks until the user retrieves the fax from the Job Separator tray*.

*When the Job Separator tray is not installed, the LED stops blinking when the received fax has finished printing.

Other Key Features

- **F-Code Communication** enables confidential communication, relay request transmission, and memory polling with fax machines from other brands that conform to the ITU-T F-Code (sub-address and pass code) standard
- **Automatic Reduction** automatically reduces the size of the document being sent or received to fit the paper size of the recipient machine or the AR-M162
- **Memory Transmission/Reception** stores documents in memory, allowing the originals to be returned to the user quickly and saving incoming faxes in memory if the AR-M162 runs out of paper or toner
- **Timer Transmission** enables unattended after-hours operation when reduced phone rates are in effect
- **Polling** allows the user to retrieve a document left in the feeder of a remote fax machine
- **Long originals** (up to 800 mm long) can be sent using the SPF
- **Broadcast** faxing to up to 200 locations
- **Programme keys** (up to 9 keys) are available to set up frequently used transmissions for instant recall
- **Rotation Reception/Transmission** rotates incoming or outgoing faxes to match the direction of the printing paper size
- **Divided Reception** prints out long-length faxes onto separate sheets of paper

USER- AND ENVIRONMENT-FRIENDLY

Operation Panel

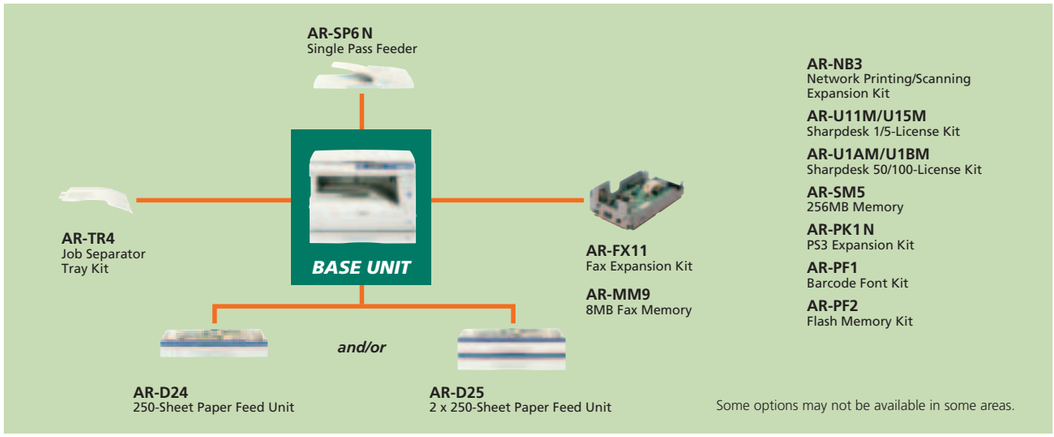
The AR-M162's operation panel is created under a **universal design** concept, making it easy for everyone to use, from office equipment novices to the physically challenged.

- New easy-to-read 5-line LCD
- Optimum-height operation panel for easy access
- Easy-to-press and -feel indented keys
- Notification sounds for default levels in manual settings (zoom, exposure, etc.)
- Delayed response setting gives enough time to cancel operation

Environmentally Conscious Design

- The AR-M162 conforms to the **Energy Star** programme, an international system identifying energy-efficient products that conserve natural resources and reduce environmental pollution.
- The AR-M162 has two levels of **energy-saving modes**, Pre-Heat and Auto Power Shut-Off, to reduce or shut off electricity used in the fusing unit after a period of inactivity. These modes save running costs while the machine is not in use.
- The AR-M162 uses **chromium-free** surface-treated steel sheet and **lead-free** wiring harnesses and AC power cords.

System Configuration



Some options may not be available in some areas.

ELECTRONIC OPTIONS TO EXPAND KEY FEATURES

	COPY	PRINT	SCAN	FAX	SECURITY
Base Unit (AR-M162)	Max. 16 cpm, E-sort	16 ppm (SPLC)	Full colour, Sharpdesk™	–	Copy auditing
AR-NB3	–	Network printing, PAU, status monitor, PCL6/5e, TIFF direct printing	Network colour scanning, LDAP	–	IP/MAC address filtering, print/scan auditing, network port/protocol management
AR-PK1N	–	PS3, PDF direct printing	–	–	–
AR-PF1/PF2	–	Barcode fonts, font & form download	–	–	–
AR-FX11, AR-MM9	–	–	–	Super G3, PC-fax*	Fax auditing

*Consult your local Sharp dealer for the date of availability.